



This guidance document is advisory in nature but is binding on an agency until amended by such agency. A guidance document does not include internal procedural documents that only affect the internal operations of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules and regulations made in accordance with the Administrative Procedure Act. If you believe that this guidance document imposes additional requirements or penalties on regulated parties, you may request a review of the document.

Land Application of Domestic Septage Fact Sheet

Land application is an allowable method for the disposal of domestic septage. [Title 124 - Rules and Regulations for the Design, Operation, and Maintenance of Onsite Wastewater Treatment System](#) prohibits the land application of wastewater containing high strength disinfectants, biological inhibitors or deodorants or similar chemicals such as those used in camper waste tanks, laboratories, medical or veterinary facilities or industrial facilities.

Domestic septage may be land applied under the following conditions:

- General
 - Only non-public contact sites such as agricultural land, forests and reclamation land can be used for the land application of domestic septage; and
 - Land application of domestic septage is prohibited:
 - § Without the landowner's written permission; and
 - § Within the following setback distances (Table 23.1. of [Title 124](#)).

Feature	Minimum Setback
Surface water	100 ft (30m)
Public drinking water supply wells	1000 ft. (300 m.)
All other water wells	200 ft. (60 m.)
Water lines	50 ft. (15 m.)
Property line	200 ft. (60 m.)
Public road right-of-way	200 ft. (60 m.)
Buildings used for human occupancy	500 ft. (150 m.)

- Vector Attraction Reduction
 - Untreated domestic septage must be:
 - § Injected below the surface of the land; or
 - § Incorporated into the soil by disking or plowing within six hours after application.

Note: No significant amount of septage can be present on the land surface within one hour after injection.

- Domestic septage that is applied to the land surface and is not injected or plowed-in within six hours must be treated prior to application by raising and holding the pH at a level of 12 or higher for a minimum of 30 minutes. The minimum treatment method for raising the pH of the domestic septage shall be the addition and thorough mixing of no less than 50 pounds of hydrated lime per 1,000 gallons of septage.
- Crop, Grazing and Site Restrictions and Pathogen Reduction
 - Land application of domestic septage is prohibited:
 - § On land from which human food crops with harvested parts below the ground, such as but not limited to potatoes or beets, will be harvested in the next 38 months after application;
 - § On land from which human food crops with harvested parts touching the ground surface, such as but not limited to melons, will be harvested in the next 14 months after application;
 - § On land from which human food crops with harvested parts that do not touch the ground surface, such as but not limited to dry edible beans or sweet corn, will be harvested in the next 30 days after application;
 - § On land from which crops grown for animal food or fiber will be harvested in the next 30 days after application;
 - § On land on which turf grass is grown for transplantation to lawns and other areas with potential for frequent human contact;
 - § On land on which livestock will be grazed in the next 30 days after application; and
 - § In areas readily accessible or frequently used by the public, such as but not limited to: parks; golf courses; sports fields; recreational lands; or residential or business development areas.
 - Public access to land where domestic septage is applied must be restricted for a minimum of 30 days after application of the septage by:
 - § Fencing;
 - § No-trespassing signs; or
 - § Remoteness
 - [The Master Pumper, Journeyman Pumper, registered environmental health specialist or professional engineer](#) applying the domestic septage must inform the land owner of all harvesting, grazing and site access restrictions.
 - Land application of domestic septage at a rate that exceeds the amount of nitrogen required by the crop or vegetation is prohibited. When calculating the maximum nitrogen application rates, all other sources of nitrogen such as livestock manure or commercial fertilizer must be deducted from the total nitrogen requirement.

- Domestic septage must be spread, sprayed or injected in a manner that does not cause localized pooling, ponding or runoff.
- Application of septage using a rate or method that creates a layer of septage exceeding one-quarter inch thick at any location on the ground surface immediately following application is prohibited.
- Land application of domestic septage on saturated, frozen or snow-covered ground is prohibited except as provided below for an emergency situation where the air temperature is below 10 degrees Fahrenheit; the distance to a suitable storage facility or publicly owned wastewater treatment facility for proper storage or disposal is more than 30 miles; and no other reasonable disposal or storage method is available:

- § The ground slope of the land application site must not exceed five percent and the site must be covered with dense perennial vegetation;
- § The waste must be treated as provided in Title 124 and the land application rate must not exceed 10,000 gallons per acre regardless of the nitrogen content of the waste;
- § The minimum setback requirements in Table 23.1 of Title 124 must be doubled;
- § The recorded information must include: a description of the emergency situation; the air temperature; the distance to the nearest suitable storage facility or publicly owned wastewater treatment facility; and a description of the soil conditions.

Note: All other applicable requirements in Chapter 23 of Title 124 must be met.

- Record Keeping

- The Master Pumper, Journeyman Pumper, registered environmental health specialist or professional engineer must keep records of all domestic septage pumped for a minimum of five years and make the records available to the Department upon request.
- When domestic septage is disposed by land application, the following information must be recorded for each land application site:
 - § Location and legal description of the application site;
 - § Name and address of the application site owner and the landowner's written permission to use the site for the land application of domestic septage;
 - § Acreage of the site to which domestic septage was applied;
 - § Type of crop or vegetation, expected yield and annual nitrogen requirement;
 - § Maximum rate of septage application based on nitrogen requirement (gallons per year);
 - § Harvesting or grazing schedule for the site; and
 - § Certification statement that pathogen reduction and vector attraction reduction requirements have been complied with.

- For each load of septage applied to the site, the following information must be recorded:
 - § Date of application;
 - § Gallons of septage applied;
 - § Total gallons of septage applied year-to-date at the site;
 - § Sources (owner name and address of each tank pumped);
 - § Gallons pumped from each source;
 - § Method of application (surface application, surface application plowed-in within six hours or direct subsurface injection);
 - § Method of treatment (none, pH adjustment);
 - § If treated by pH adjustment the pounds of hydrated lime used; and
 - § Name, certificate or license number, and signature of the Master Pumper, Journeyman Pumper, registered environmental health specialist or professional engineer who applied the septage.